## INDEX OF CLAIMS

| • | Rejected                   | .1  | ٧ | Non-electe   |
|---|----------------------------|-----|---|--------------|
| = | Allowed                    |     | ١ | Interference |
| _ | (Through numeral) Canceled | . • | A | Appeal       |
|   | Restricted                 | . ( | 0 | Objected     |

|  |          |           |                    |           | •        |          |          |                |            |          |          |           |          |              |              |                   | _            |  |          |          |          |          |          |     |  |            |          |           |  |                         |                    |                |            |          |          |   |
|--|----------|-----------|--------------------|-----------|----------|----------|----------|----------------|------------|----------|----------|-----------|----------|--------------|--------------|-------------------|--------------|--|----------|----------|----------|----------|----------|-----|--|------------|----------|-----------|--|-------------------------|--------------------|----------------|------------|----------|----------|---|
| lm                                     |          | _         | _                  |           | D        | ale      |          |                |            |          | <u> </u> | . [       | niak     | floor        |              |                   |              | D  | ale      |          |          |          |          |     |  | Clai       | m        |           |  |                         | _(                 | Date           |            |          | -        |   |
| O O O O O O O O O O O O O O O O O O O  |          |           |                    |           |          |          |          |                |            |          |          |           | Ortoinat | 2            |              |                   |              |  |          |          |          |          |          |     |  | Final      | Orginal  |           |  |                         |                    | ŀ              |            | •        | _        |   |
| (1)                                    | ,        |           | 1                  | T         | 1        | T        | †        | †              | 十          | †        | 7        | -         | 6        | 十            | †            | †                 | T            | T  | 十        | †        | †        | T        | 寸        | 7   |  |            | 01       | $\dagger$ | †  | +                       | +                  | 十              | 十          | +        | -        |   |
| Ž                                      | l l      |           |                    | ,         |          | T        | T        | T              | 7          | T        | 7        | E         | 5:       | 2            | 1            | T                 | Τ            | Ι  |          |          |          | T        |          |     |  |            | 02       | 十         | 十  | $\top$                  | 十                  | 十              | +          | ╅        | <b>-</b> |   |
| 13                                     |          | Π         | Г                  | Τ         | T        | 1        | 1        | T              | 7          | T        | 7        | Γ         | 53       | 3            | T            | 1                 | 1            | T  | T        | T        |          | T        | Ŧ        | 7   | ٢                                      |            | œ        | +         | 1  | 十                       | 十                  | +              | 十          | +        | -        |   |
| Z                                      |          |           |                    | L         |          | Ι        | Γ        |                | T          | Ι.       | ]        |           | -54      |              |              |                   | $\mathbf{L}$ |  | L        | I        | I        | I        | ·        | ]   | Ľ                                      |            | 24       |           |  | 1                       | 7                  | $\top$         | 十          | 十        | -        |   |
| 16                                     |          | _         | L                  | L         |          | L        | L        | 1              |            |          |          |           | 51       |              | L            | 1                 | ┺            | 丄  | Ŀ        | 1        | 1_       | $\perp$  | 4_       | 1   |  | 10         | _        |           | $\perp$  | $oldsymbol{\mathbb{L}}$ | ${\mathbb T}$      |                | $\perp$    |          | _        |   |
| \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | _        | _         | L                  | L         | L        | ╀        | 4        | 1              | <u> </u>   | 4        | 4        | L         | 56       |              | L            | ļ.,               | ╀            | L  | 1        | ╀        | 4        | 1        | ╀        | 1   | L                                      | 10         |          | 4         |  | L                       |                    |                | $\perp$    |          | -        |   |
| P                                      | -        | -         | <b> </b>           | _         | ŀ        | ╀        | ╀        | <del> </del> - | +          | 4-       | 4        | -         | 67       | _            | ╁-           | ╄                 | ╀            | ╀  | ┼-       | ╀╌       | ╁        | +        | ╁        | -   | -                                      | 10         |          | 4         | 4  | 4                       | 4                  | 4_             | 1          | 1        |          |   |
| -                                      | -        |           | ┝                  | ┝         | ╀        | ╀        | ╀        | ╁              | ╁          | ╂        | ┨        | -         | 68<br>59 |              | ╄            | ╀                 | ╁╌           | ╁  | ╀        | ╀        | ╁        | ┿        | ╁        | ┨   | ┢                                      | 10         | _        | +-        | ╀  | ╀                       | +                  | +              | ╀          | ╀        | -        |   |
| 10                                     | ╗        | _         | -                  | -         | ┼╌       | ╁╌       | ╁        | ╁              | ╌┼╴        | ╫        | ┨        | $\vdash$  | 80       |              | ╁            | 十                 | 十            | ╁╌   | ╁        | ╆        | ╁        | 十        | 十        | ┨.  | -                                      | #          |          | +         | ╁  | ╁                       | ╁                  | ╁              | ╁╌         | ┿        | •        |   |
| 10                                     | -        | _         | -                  | ┢         | 1-       | 恄        | 忊        | †-             | †          | ╅╴       | 1        | 上         | 81       |              | 十            | t                 | 十            | †  | 十        | 广        | 十        | t        | +        | 1   | $\vdash$                               | 111        |          | †         | ╁  | +-                      | ╁                  | ╁              | ╁╴         | ╁╴       |          |   |
| 12                                     |          |           |                    |           |          |          |          | Ι              | Ι          | I        | ]        |           | 62       |              |              | Γ                 |              |  |          |          | I        | I        | Ι        | ]   |  | 11         | 2        | T         | T  | 1                       | T                  | 1              | †          | 十        |          |   |
| 10                                     |          |           |                    |           |          |          | L        | L              | Ŀ          | L        | ]        |           | 63       |              |              |                   | L            |  | L        |          | L        |          | Γ        |     |  | 11         | 3        |           | Ι  | Ι                       | I                  | ]              | Ι          | I        |          |   |
| 120                                    | $\Box$   |           | L.                 | L         |          | L        | L        | $\bot$         | 1          | L        | 4        | L         | 64       |              |              | L                 | L            | L  | 1        | Ļ        | _        | L        | 1_       | ŀ   | L                                      | 11         |          | L         | $\bot$   |                         | L                  | I              | L          | L        |          |   |
| 15                                     | 4        |           | _                  | _         | <u> </u> | 1        | 1        | +              | +          | +        | -        | <u> </u>  | 65       |              | <del> </del> | ⊢                 |              | <del> </del>                                     | ╄        | ╀        | ╀        | ╀        | ╀-       | ł   | <u> </u>                               | 11         |          | ┞-        | +  | ╀-                      | 1                  | 1              | 1          | 4        |          |   |
| H                                      | 4        | _         |                    | <u> </u>  | -        | -        | -        | +              | +          | +-       | -        | $\vdash$  | 66<br>67 | -            | -            | -                 | -            | ┝  | -        | -        | +        | +        | ╁        |     | -                                      | 11         |          | -         | +  | +                       | +                  | +              | 1          | +        |          |   |
| 18                                     | -        |           |                    | -         | $\vdash$ | ╁╌       | ╂        | ╁              | ╁          | ╁        | 1        | -         | 68       | $\vdash$     | $\vdash$     | $\vdash$          | ┢            | ├-   | ╁        | ┢        | ╁        | -        | ├-       |     | -                                      | 11         |          | ╀         | ┿  | $\vdash$                | ╀                  | +              | ╀          | +        | -        | • |
| 19                                     | +        |           |                    | -         |          | 1        | t        | 十              | T          | T        | 1        | $\vdash$  | 69       | H            | <del> </del> |                   | $\vdash$     | _  | 1        | ├-       | 十        | $\vdash$ | $\vdash$ | ١.  |  | 111        |          | 1         | +  | 1                       | +                  | +              | ╁╌         | +        |          |   |
| 20                                     | 7        | -         |                    |           | ┢        | 一        | 十        | Τ.             | 1-         | T        | ŀ        | $\vdash$  | 70       | -            | ┢            | ┢                 | -            | <del>                                     </del> | H        | ┢        |          | H        |          | i   | $\vdash$                               | 12         |          | f         | ╀╌   | ┢                       | ╁╴                 | ╁              | $\vdash$   | +        |          |   |
| 21                                     | 7        |           |                    |           | ┝┈       | ┢        | ┢        | 十              | 十          | 十        | 1        | -         | 71       | <u> </u>     | ┢            | H                 | ┝            | -  | $\vdash$ | -        |          | ┞        |          |     | -                                      | 12         |          | 一         | ╫  | ╁╴                      | ┢                  | +              | ┢          | +        |          |   |
| 22                                     | 1        |           |                    |           |          |          |          | 上              |            |          | 1        |           | 72       |              |              |                   |              |  |          |          |          |          |          |     |  | 12         | 1        |           |  |                         |                    | 1              |            |          |          |   |
| 23                                     | $\Box$   |           |                    |           |          |          |          |                | E          | Г        | 1.       |           | 73       |              | Ы            |                   |              | L  |          |          | $\Box$   |          |          |     |  | 12         | 3        |           |  |                         |                    |                |            | Γ        |          |   |
| 24                                     | _        | _         |                    |           | Ŀ        | Ŀ        | Ĺ        | Ļ              | ╄          | ┞        | 1        | ┈         | 74<br>75 | <u> </u>     |              | _                 | _            |  | _        | Ŀ.       | <u> </u> | Ŀ        | ļ.       |     | $\vdash$                               | 124        | _        | Ĺ         | ┞  | <u> </u>                | ļ                  | <del> </del> _ | <u> </u> _ | Ļ        |          | • |
| 25                                     |          | $\dashv$  |                    |           | ⊢∸       |          | ŀ        | ╀              | ╂-         | ├        | ┨        | <b> -</b> | 76       | -            | -            | -                 | H            | -  | -        | <u> </u> | ├        |          | -        |     | -                                      | 12t        |          | ├         | ╀  | <del> </del>            | ╀                  | ⊢              | H          | ╀        |          |   |
| 26<br>打                                | $\dashv$ | $\neg$    |                    | -         | -        | ┞        | ┝        | ╂─             | ⊬          | ╀╌       | ┨ .      | -         | 77       | ┝            | H            | $\vdash$          | -            | Н  | -        | -        | -        | -        | H        |     | $\vdash$                               | 127        |          |           | ╂╼   | ├                       | ╁╌                 | ╁╌             | -          | ╁        |          |   |
| 撒                                      | 寸        |           | _                  | •         | _        | ┢        | -        | †              | <u>t</u>   | ヤ╌       | 1        | $\vdash$  | 78       | <del> </del> | _            | H                 |              | ┢  |          | <u> </u> | $\vdash$ |          |          |     |  | 128        |          | ┞         | <del>                                     </del> | 一                       | -                  | ╁              | ┢          | <b>†</b> |          |   |
| <b>1</b>                               | 1        |           | $\overline{\cdot}$ |           |          |          |          |                | Ė          |          | j        |           | 78       |              |              |                   |              |  |          |          |          |          |          |     |  | 128        |          |           |  |                         |                    |                |            | Τ.       |          |   |
| 39<br>30                               | $\Box$   |           |                    |           | ,        |          |          |                |            |          | ]        |           | 60       |              |              |                   |              |  |          |          |          |          |          |     |  | 130        |          | Ŀ         |  |                         |                    |                |            |          |          |   |
| 181                                    | 4        |           |                    |           |          | L        | Ŀ        | L              |            |          | ]        | L.        | 81       |              |              |                   |              |  | Щ        |          | Ŀ        |          |          |     | _                                      | 131        |          |           |  |                         |                    |                |            | L.       |          |   |
| 33                                     | 4        | _         | _                  | ႕         |          | _        | _        | <u> </u>       | <b>!</b> _ | <u> </u> | ŀ        | 1         | 82       | _            |              |                   |              |  | Ш        |          | L        | Щ        |          |     | <u> </u>                               | 132        |          | L.,       | _  |                         | <u> </u>           | <u> </u>       | _          | _        | •        | • |
| 13                                     | 4        | $\exists$ |                    | $\dot{-}$ |          | _        | _        |                |            |          | ł        | Ŀ         | 83<br>84 |              | $\vdash$     | Щ                 |              | -  |          |          | <u> </u> | Н        |          |     | <b> </b>                               | 133        | }        |           |  |                         | -                  |                | _          | -        |          |   |
| 3                                      |          | $\exists$ |                    | -         | 1        | Hi       | Ш        |                |            |          |          |           | 85       |              |              |                   |              |  |          |          |          |          |          | -   |  | 135        |          |           | Ħ  |                         |                    | <b>7</b> -     | _          | =        | =        |   |
| 130                                    | +        | ᅦ         | $\neg$             |           | _        |          | ┝        | ┝              | ┢          | 一        | 1        |           | 88       | -            | ᅱ            | ٦                 |              | $\dashv$   |          | $\neg$   |          |          | $\dashv$ |     | -                                      | 1,36       |          |           |  |                         | _                  |                |            |          | ••••     |   |
| 37                                     |          | 7         | _                  |           |          |          | Т        |                | -          | Г        | 1        |           | 87       |              |              |                   | ᆿ            | 7  |          |          | ·        |          |          |     |  | 137        |          |           |  |                         | $\overline{\cdot}$ |                |            |          |          |   |
| 38                                     |          |           |                    |           |          | ľ        |          |                |            |          | j .      |           | 88       |              |              |                   |              |  |          |          |          |          |          |     | ·                                      | 138        |          |           |  |                         |                    |                |            |          | •        |   |
| 38                                     | $\Box$   |           |                    |           |          |          |          |                |            |          | ]        |           | 89       |              |              |                   | $\Box$       | $\Box$   |          |          |          | ·        |          |     |  | 139        |          |           |  |                         |                    |                |            |          |          |   |
| 40                                     |          |           |                    | $\perp$   |          | ·        | _        | L              |            | L_       |          |           | 80       |              |              |                   |              |  |          |          |          |          | ]        |     |  | 140        |          |           | Ŀ  |                         |                    |                |            |          |          |   |
| 41                                     |          |           | $\Box$             |           | Ш        |          |          | _              | $\sqcup$   | L        |          | L         | 91       |              |              | $oldsymbol{\bot}$ |              | $\bot$   |          |          |          |          | ᆜ        |     | _                                      | 141        |          |           |  | _                       |                    | $\sqcup$       | _          | _        |          |   |
| 42                                     |          | _         |                    | _         | $\perp$  |          |          |                | Щ          | _        | 1        | <u></u>   | 92       | $\dashv$     | _            | _                 | _            | _  | _        | $\bot$   | _        | _        | _        |     |  | 142        |          | _         |  | _                       | _                  |                | _          | _        |          |   |
| 43                                     | 4        | _         | _                  | _         | _        |          | Щ        | L              | Щ          | ļ.       |          | <b> </b>  | 93       | 4            | _            | 4                 |              | 4  | 4        | _        | _        | 4        | _        |     | _                                      | 143        | _        | _         | $\Box$   | _                       | -                  |                |            | _        |          |   |
| 44                                     | -        | 4         | 4                  | 4         | ᅴ        |          |          | Щ              | Щ          |          | '        | -         | 94       | _            |              |                   |              | _  | 4        | _        | _        | $\dashv$ | 4        |     | _                                      | 144        | _        | _         | _  |                         | _                  |                | -          | -        |          |   |
| 45                                     | +        | -         |                    |           | -        | -        |          | $\vdash$       | Н          |          |          | -         | 95       |              | 4            | -                 | -            | -  | 4        | -        | -        | $\dashv$ | $\dashv$ |     | _                                      | 145        | _        |           | -  | -                       |                    | -+             | $\dashv$   | -        |          |   |
| 48                                     |          | +         | $\dashv$           | -         | -        |          | $\dashv$ | Н              | Н          | <u> </u> |          | $\vdash$  | 98<br>97 | $\dashv$     | $\dashv$     | -+                | +            | +  | +        | $\dashv$ | {        | +        | $\dashv$ | 1   |  | 146<br>147 | $\dashv$ |           |  |                         |                    | ᆉ              |            | -        |          |   |
| 48                                     | +        | $\dashv$  | ╌┤                 | 긕         | $\dashv$ | -        | -        | $\vdash$       | -          | $\vdash$ |          | -         | 98.      | $\dashv$     | $\dashv$     | +                 | +            | +  | +        | ┥        | $\dashv$ | $\dashv$ | ┥        |     |  | 148        | -1       | +         | +  | $\dashv$                | -                  | $\dashv$       | $\dashv$   | -        |          |   |
| 48                                     | +        | $\dashv$  | +                  | $\dashv$  |          | $\dashv$ | $\dashv$ | $\vdash$       | $\dashv$   | $\vdash$ |          | $\vdash$  | 88       | $\dashv$     | $\dashv$     | +                 | $\dashv$     | $\dashv$   | ┥        | $\dashv$ | $\dashv$ | -        | $\dashv$ |     |  | 149        | $\dashv$ | $\dashv$  | $\dashv$   | +                       | $\dashv$           | 十              | 十          | -        |          |   |
| 50                                     | +        | $\dashv$  | $\dashv$           | +         |          | ᅱ        | $\dashv$ |                | $\dashv$   | -        |          |           | 100      | +            | .            | +                 | $\dashv$     | $\dashv$   | +        | +        | +        | +        | ᅱ        |     |  | 150        | 7        | +         | $\dashv$   | $\dashv$                | +                  | 十              | +          | -        |          |   |
| _لٽٽا_                                 | 1        | Ц.        |                    |           |          |          | 1        |                |            |          | 1        | ÷         |          |              |              |                   |              |  | ╌┸       |          |          |          |          | . ' | ــــــــــــــــــــــــــــــــــــــ | لتنا       |          |           |  |                         | _                  | <u>_</u> _     |            | • •      |          |   |